

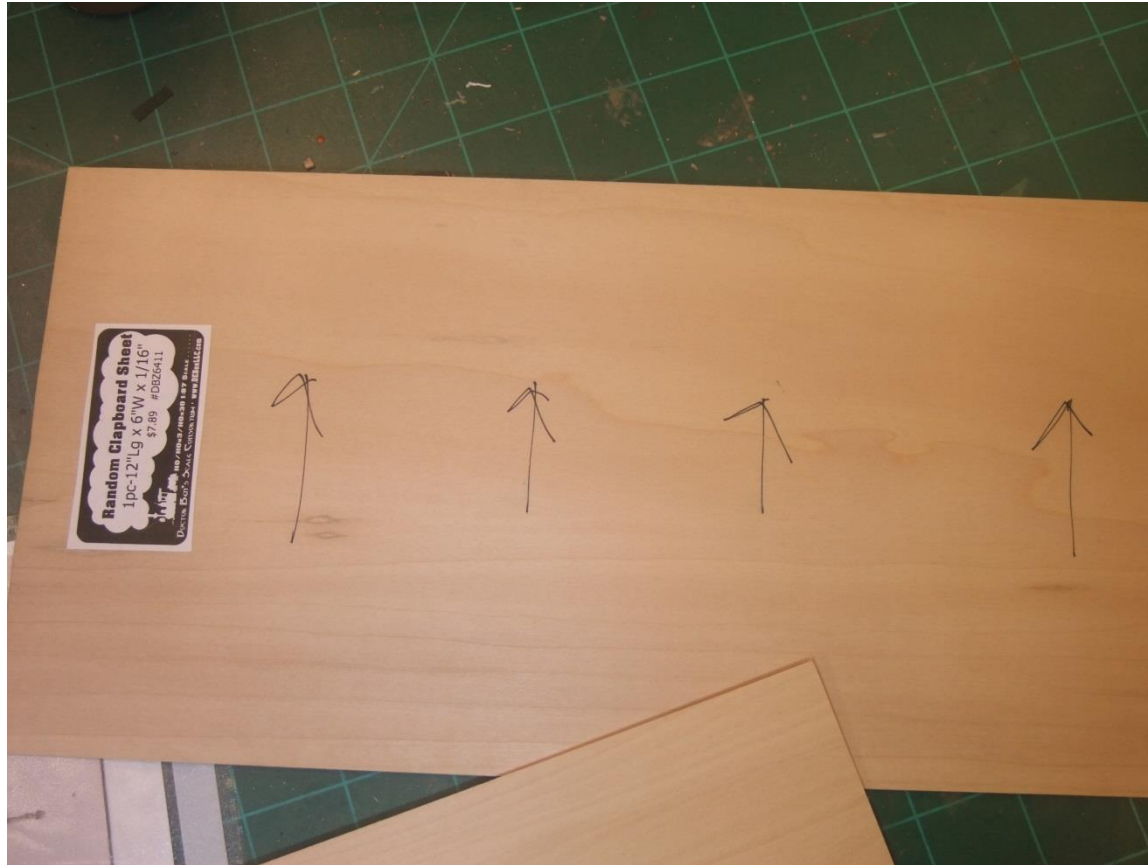
Structure Make 'n Take

Part 1

Bill Huebner, Pvt. 2nd Class

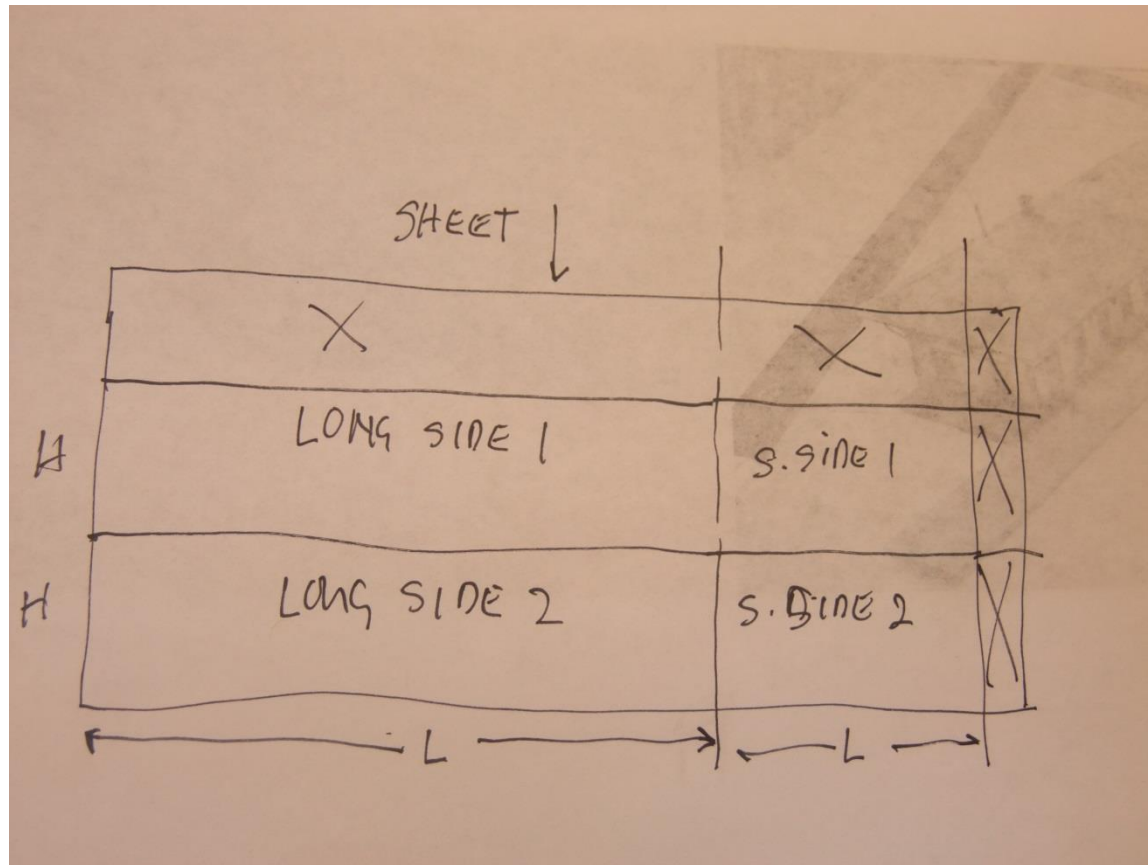
And

Duane Richardson, MMR



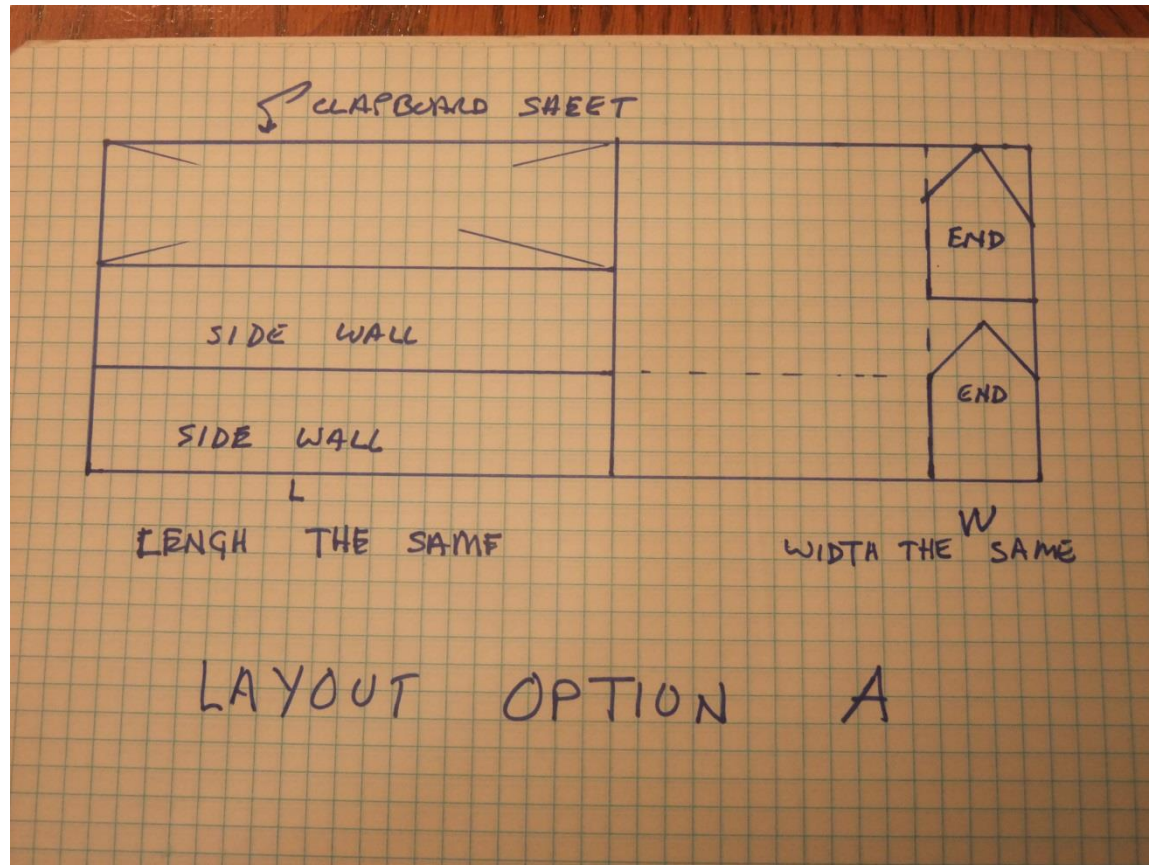
Mark Back Side of Clapboard Sheet to Show Top

Put as many marks as possible – Always keep track of which side is the top and which is the bottom – It makes a difference!

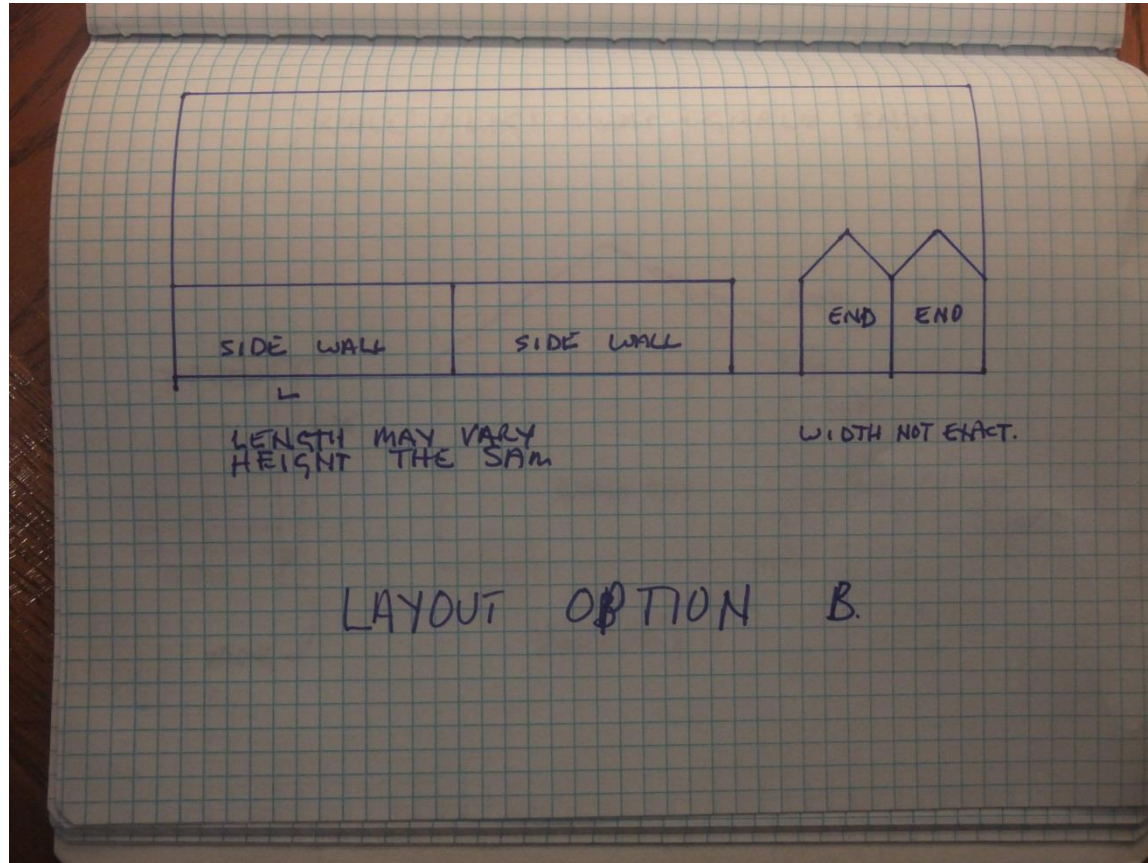


Before Cutting any Building Sides – Determine how you will lay it out.

There are 2 ways of doing this – This is the more ordinary way as you cannot normally put all four sides along the bottom of a sheet of Clapboard.



This is another picture of Option A. Note it is much Easier to keep the length of the sides the same.



Second Option – lay all sides along the bottom Edge

Advantage – the clapboards will line up along each edge and the height

Of each wall should be the same. Disadvantage – normally the sheet of clapboard is not long enough.



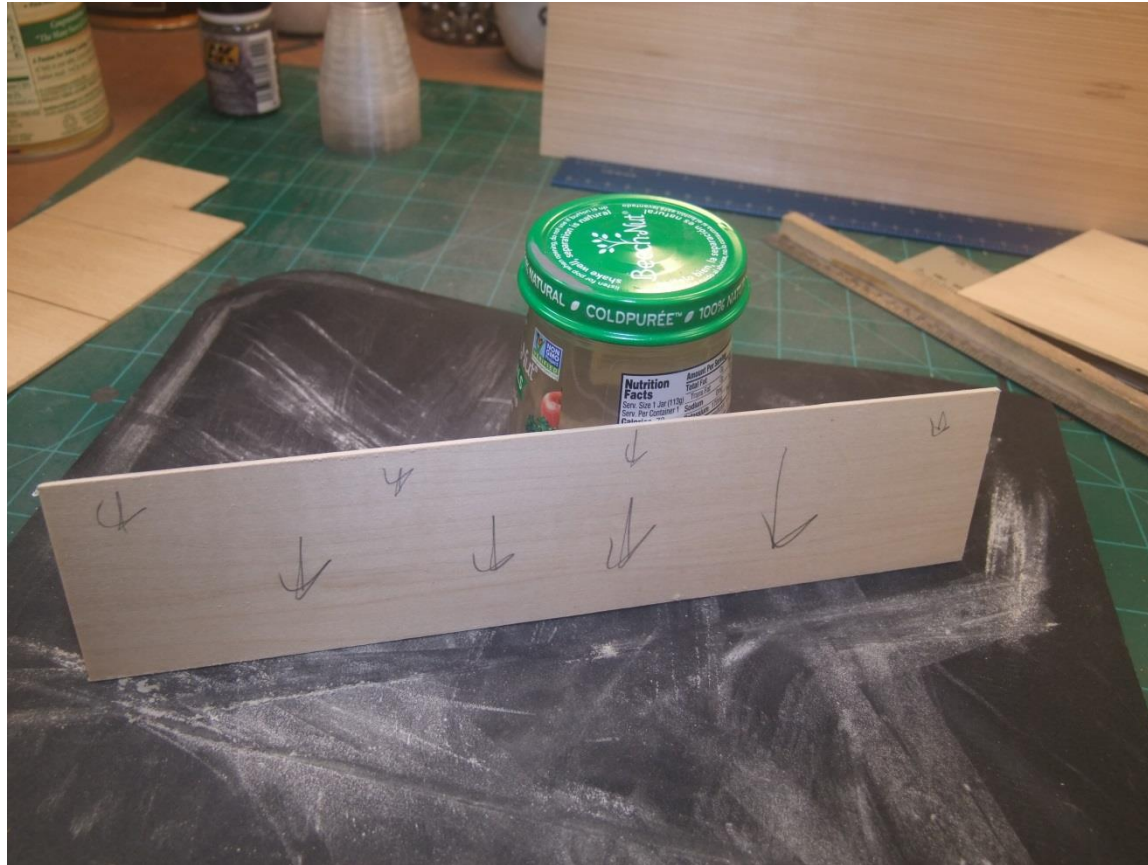
Layout walls keeping everything square.

Double check you're work. Notice how the lengths and heights should all be standard (use lines of clapboard to determine the height of building (find the next closest course of "clabs").



Scribe First – But take straight edge away, otherwise you will always get a beveled cut

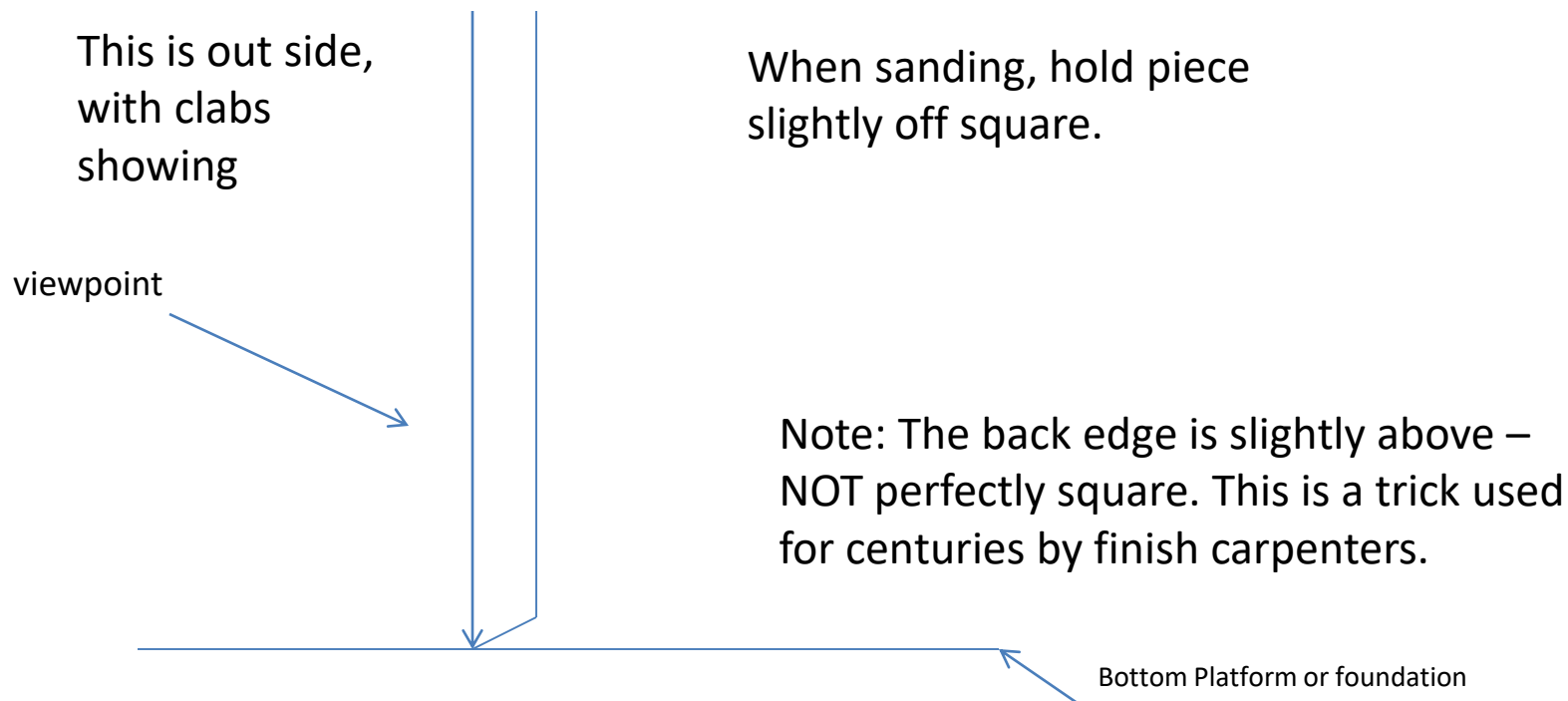
Key – cut gently, take many very light passes. Always have a gross of the new blades on hand – change out frequently.



Sand each edge – NOT square, put slightly over sanded so the back or unseen part is slightly up

Put a piece of fine sandpaper on a flat surface (here I have it on a piece of glass) and slide back and forth.

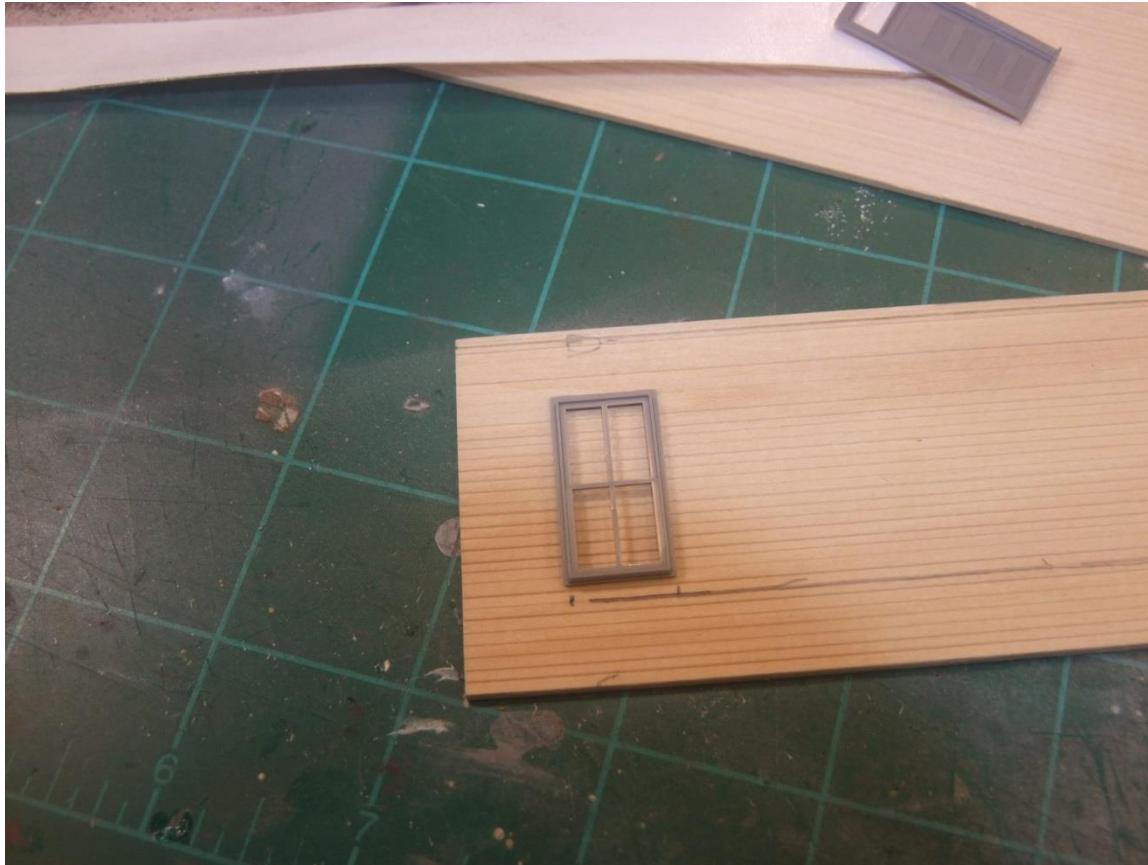
Do not sand edges square, but slightly less than square!



The advantage is, you'll always get a tight fit on the visible edge. Do the same on the edges.

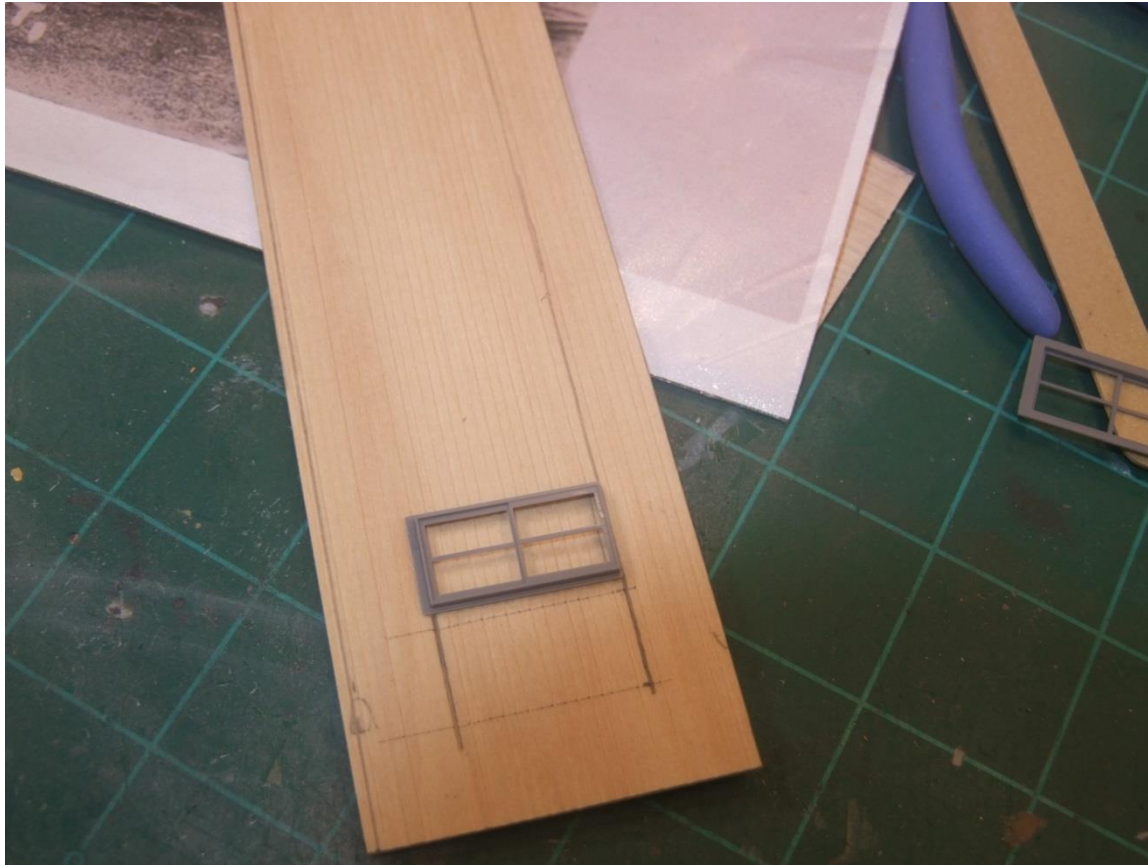


Cut out all sides check all corners are square and all dimensions are the same

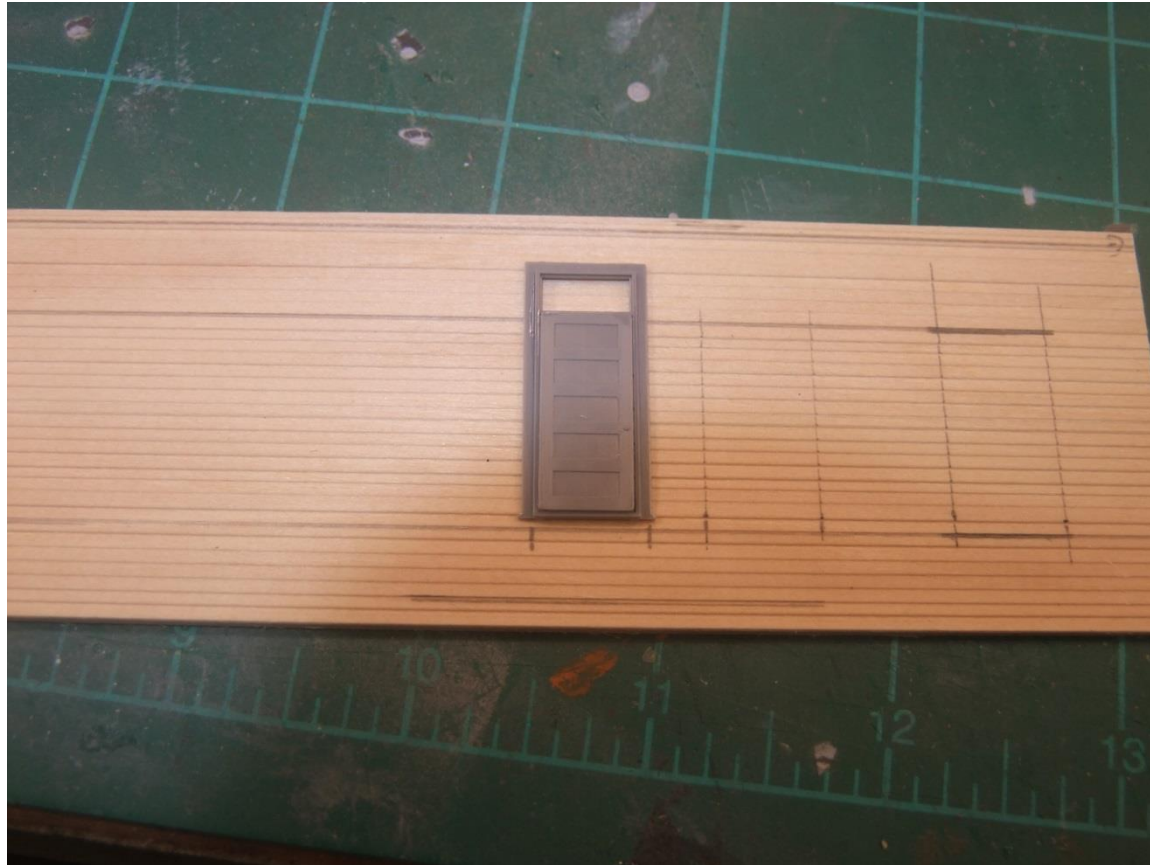


Start laying out where openings will go

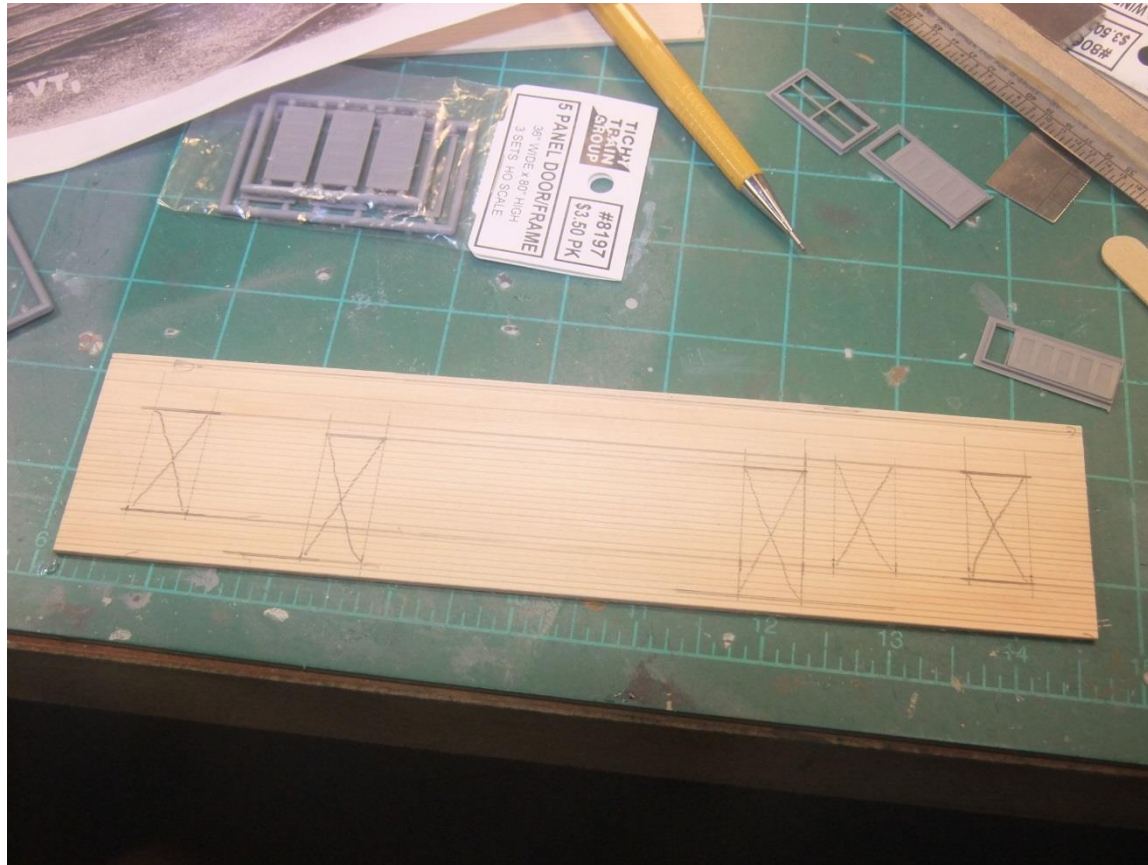
Flip door or window open to figure out how wide the opening needs to be.



**Do Same for length of windows – Make sure they
All Level – use clabs for lining up.**

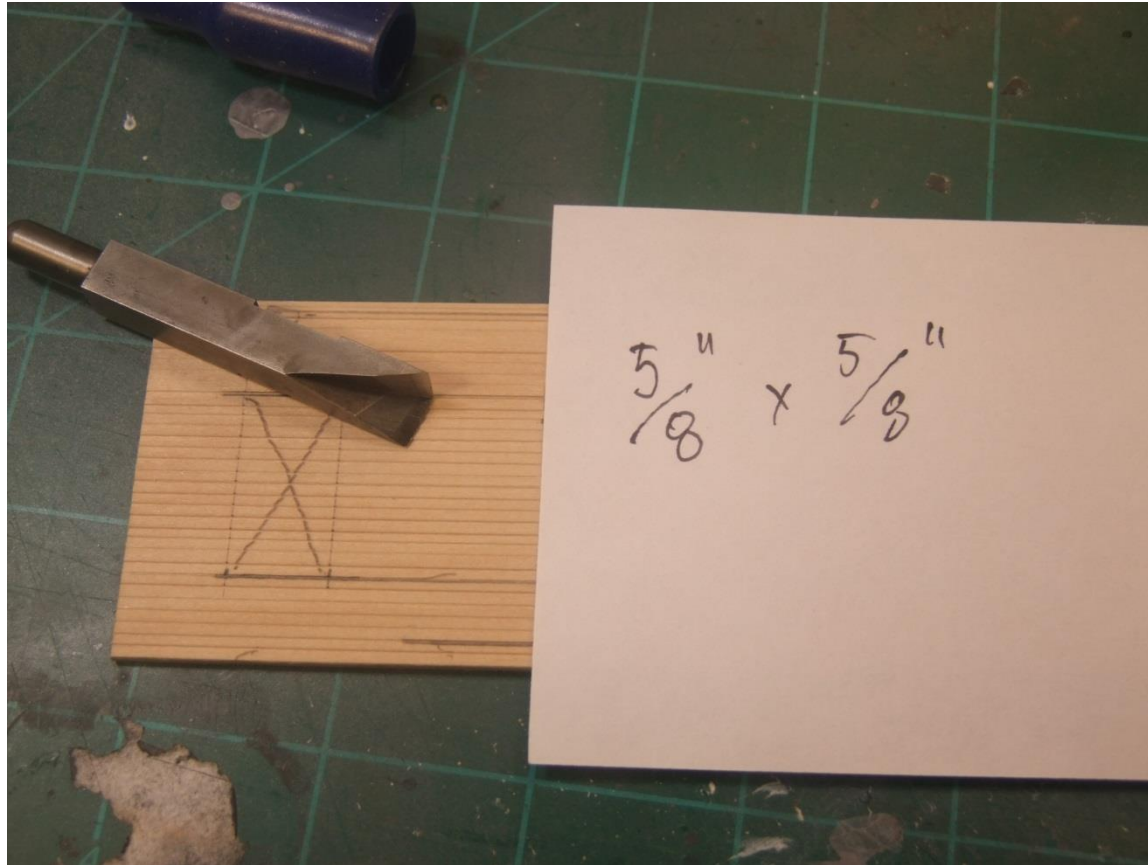


Make sure you have the bottom side down



Finished Layout – Mark what is to be removed

I find this is easier to do on the side you will see but Duane does this from the back side with a mirror image.



Cut out openings – I use this corner set from Micro Mart

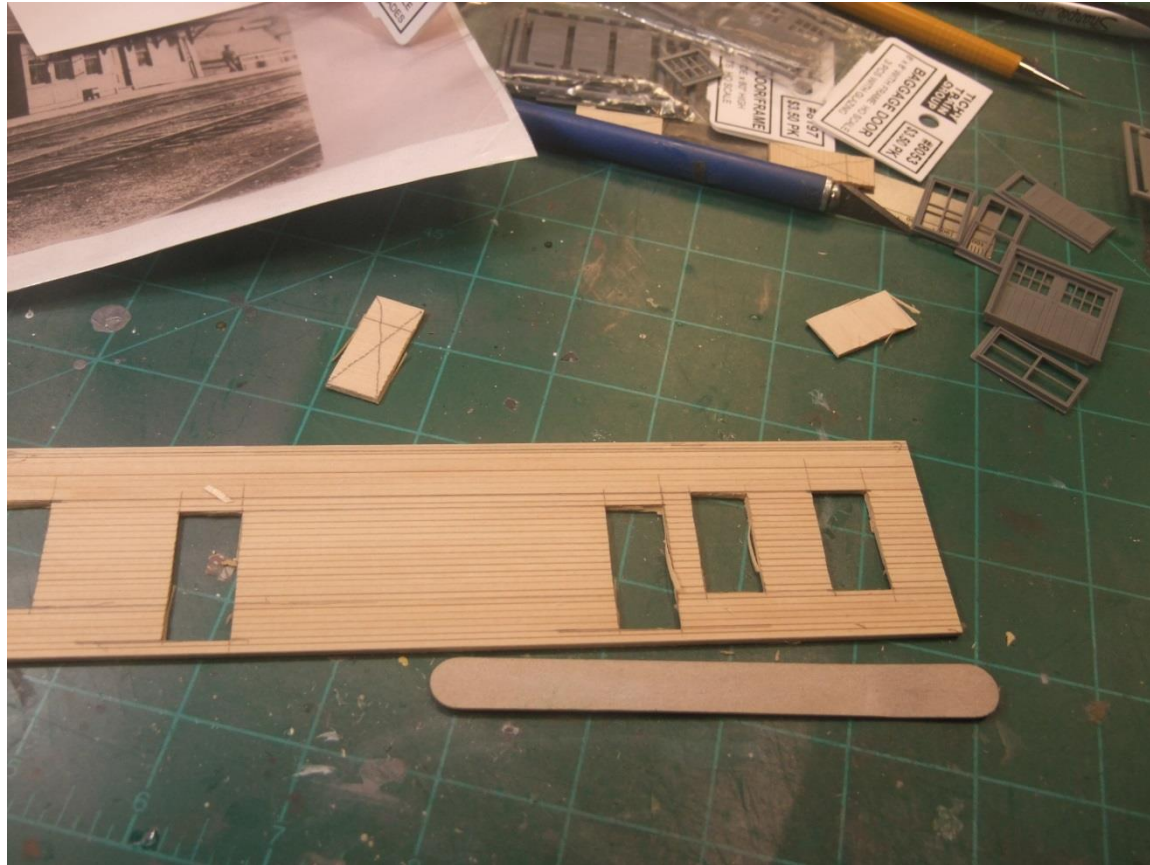
But Note: This is NOT a die cutter, it is only used to dimple the wood and give you nice sharp corners. It is NOT meant to cut through the entire sheet! Great investment.



Use a small model hammer and only set the corner



Light hammer – light taps



Clean up, check for fit (always cut a little small as we haven't yet built the expansion machine)

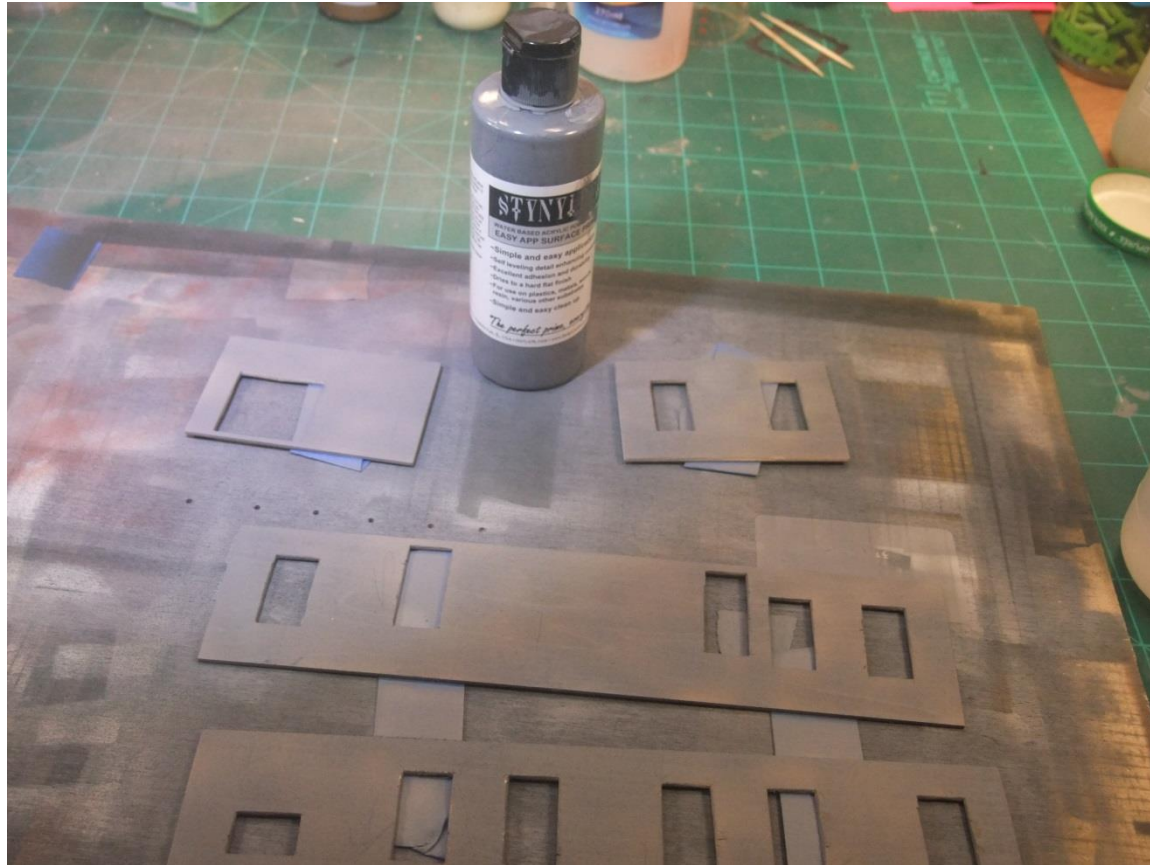


Next Step: Prime all sides with paint

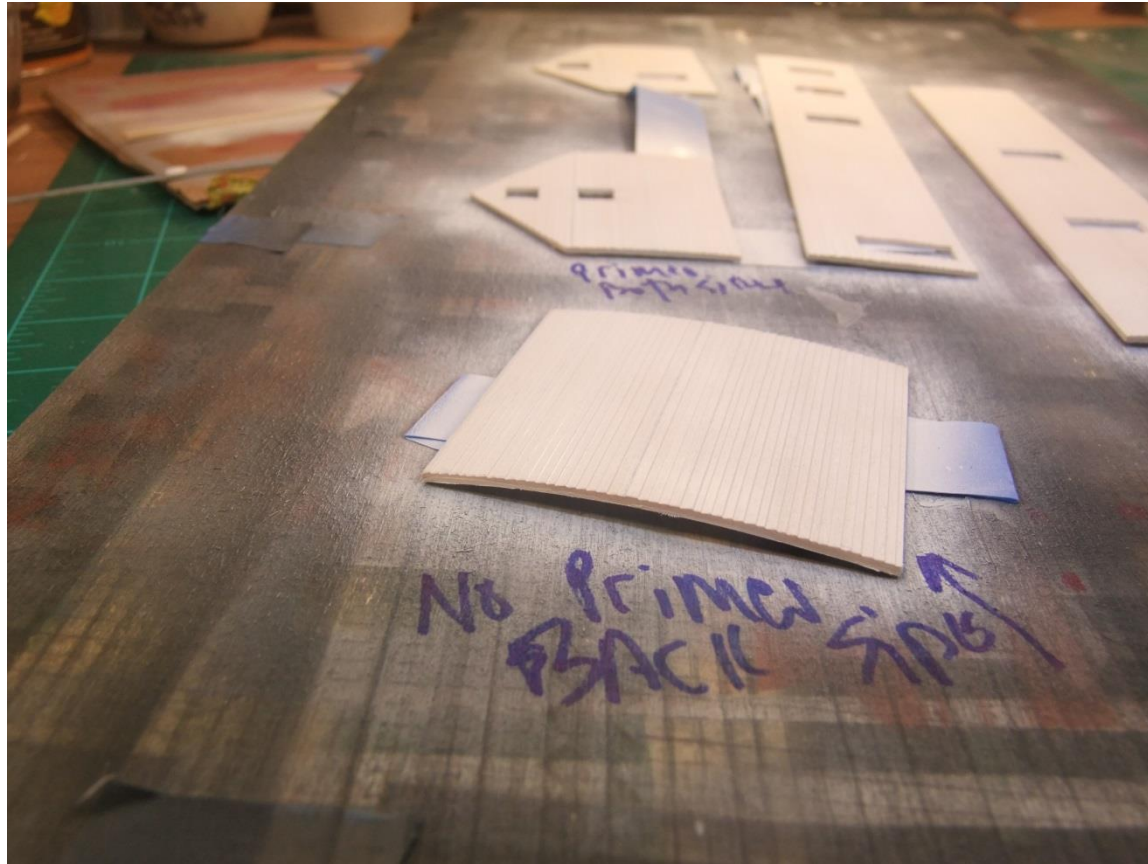
Remember, a primer coat and primer paint are different than base paint and colors (use light gray and white primer for lighter base coats, and black for darker base coats)

Huebner's 3 Immutable Laws

- 1. Never start smoking – you'll always crave nicotine.
- 2. The Second Law of Thermodynamics - entropy always increases and the process is irreversible.
- 3. Prime ALL Sides of each side of your building, not just the front!

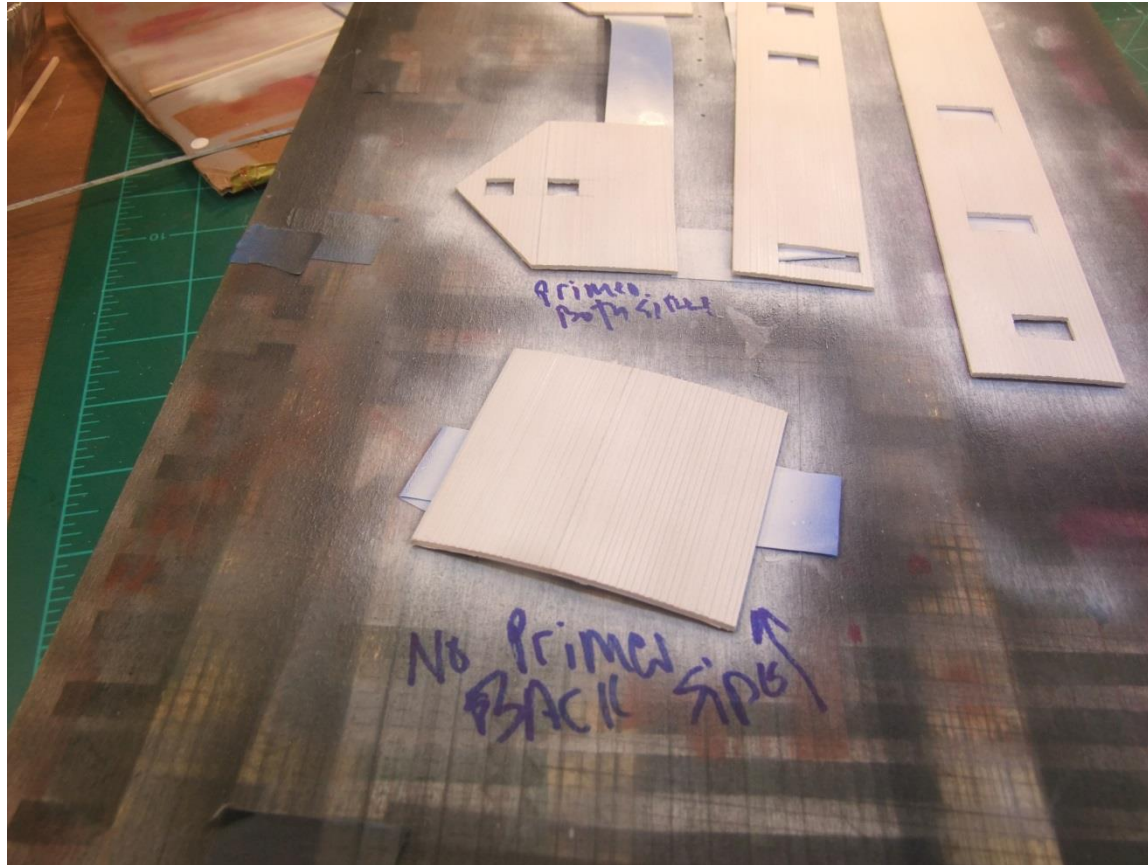


Prime Back first (I always use Stynlrez acrylic)

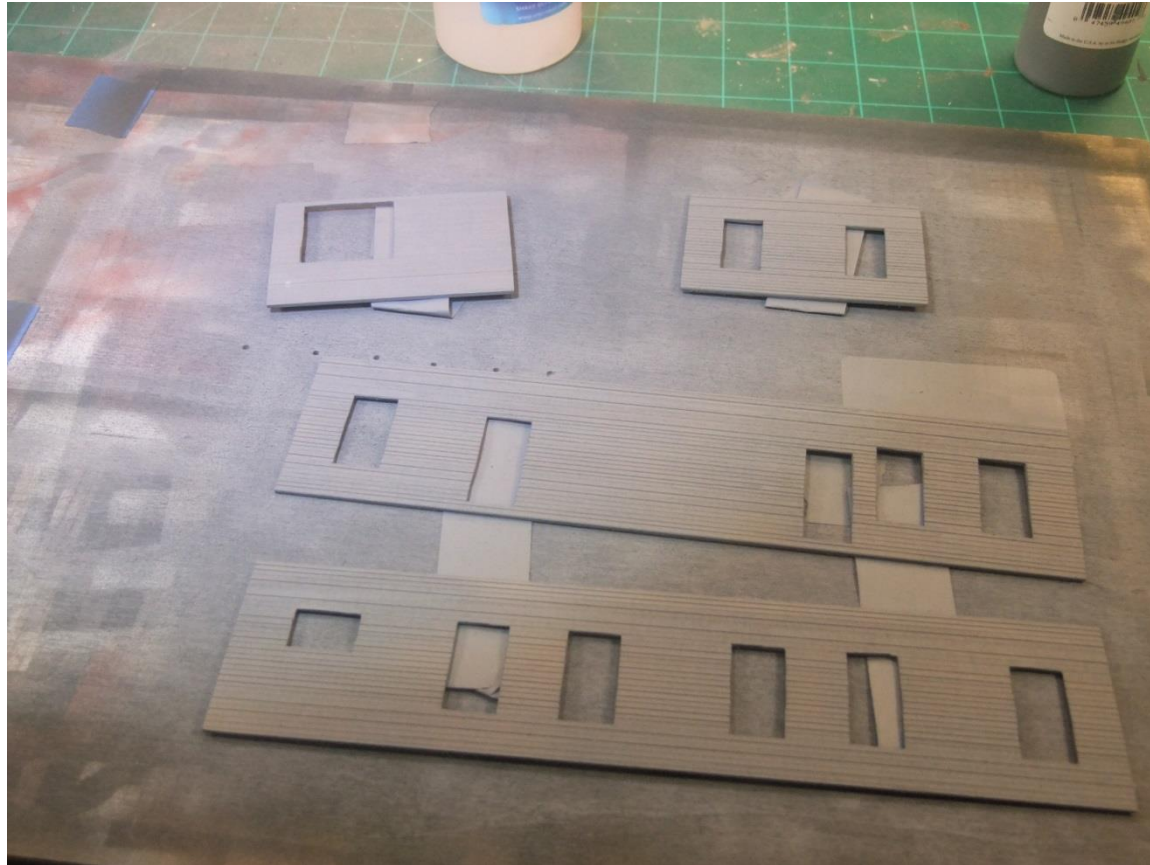


**This is what happens when you prime only one side.
Don't be this guy!**

For all the hours you spend building a structure, spend an extra nickel and prime the back!



Note how the other pieces are not bowed; this is because all sides were primed!

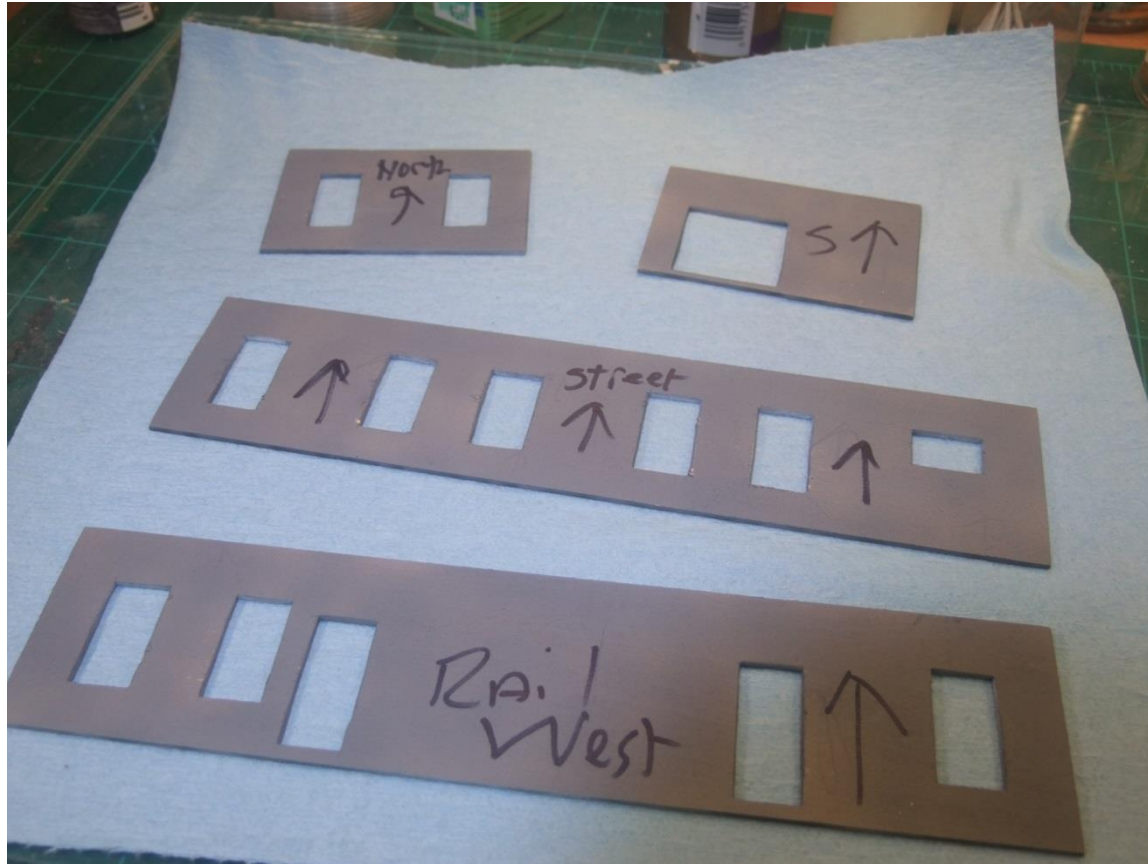


Next prime the front side of all the walls

Also prime your window and door castings at this time. **PRIME EVERYTHING ALWAYS!**

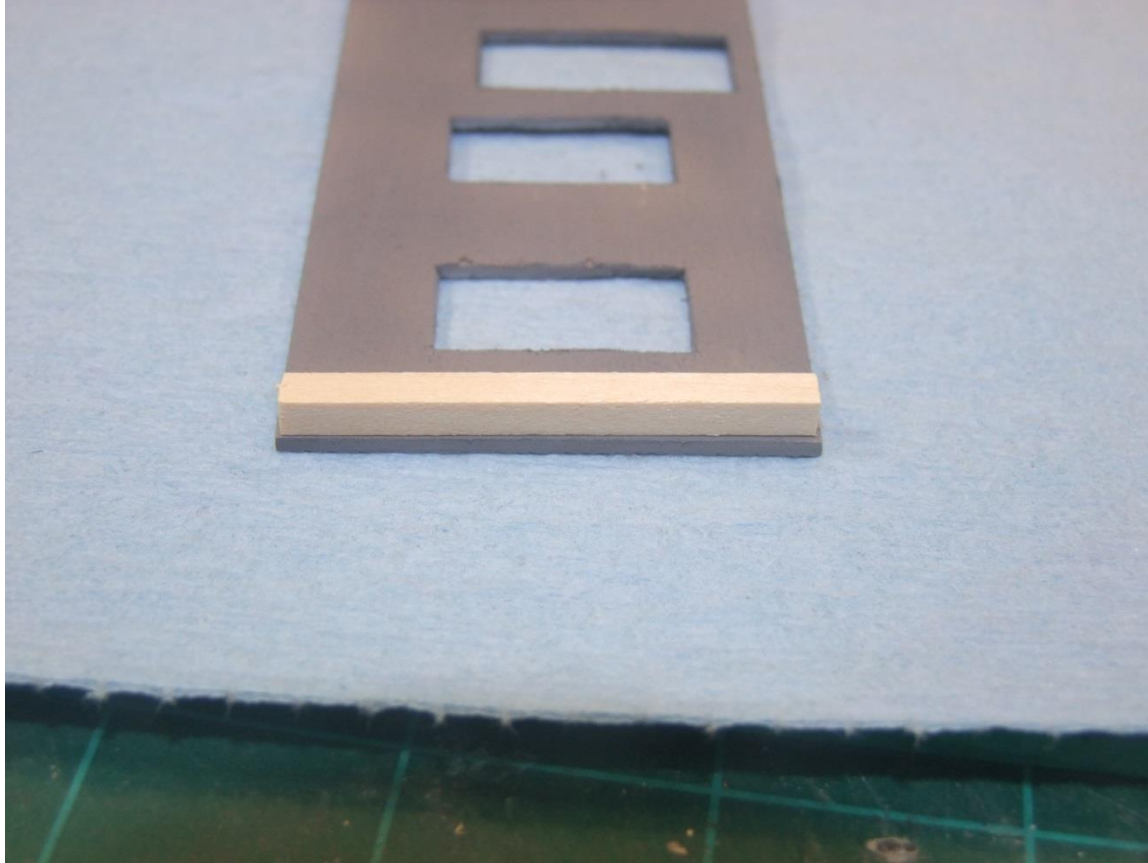


I am pre-shading; using a lighter primer on top and the gray on the bottom.



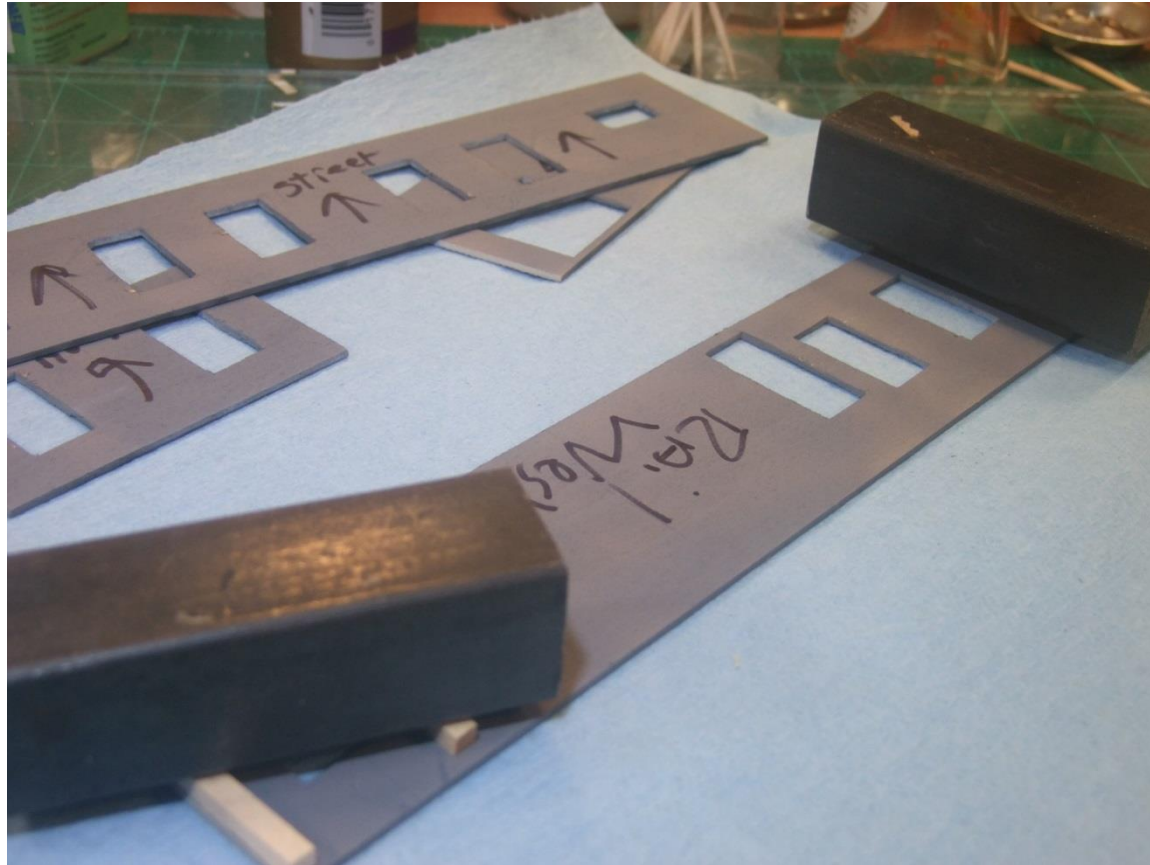
Mark the Back of Each Side – Keep Track of Clapboards

NOTE HOW I PROTECT THE SURFACE OF THE FRONT OF EACH FAÇADE, I DON'T WANT THESE MARRED AS THEY WILL THEN NEED TO BE REPAINTED.

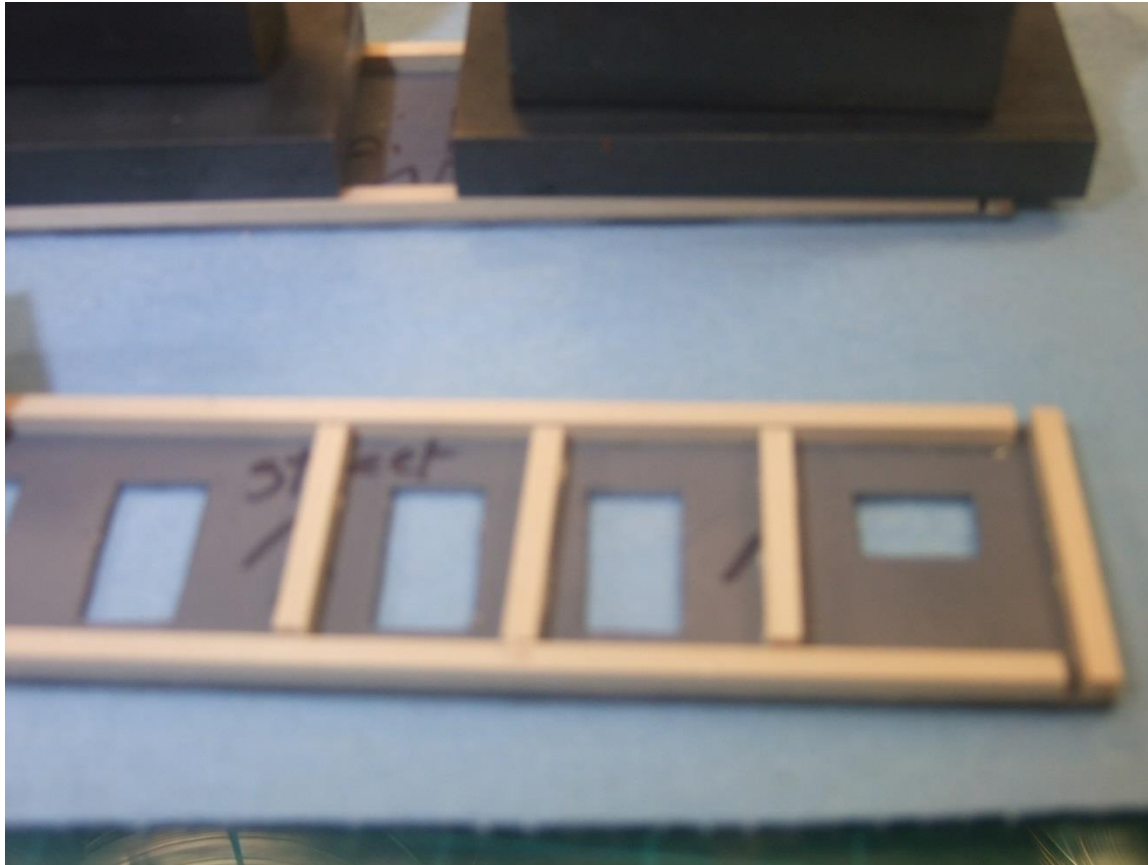


This is long side, remember, this can be flush with edge.

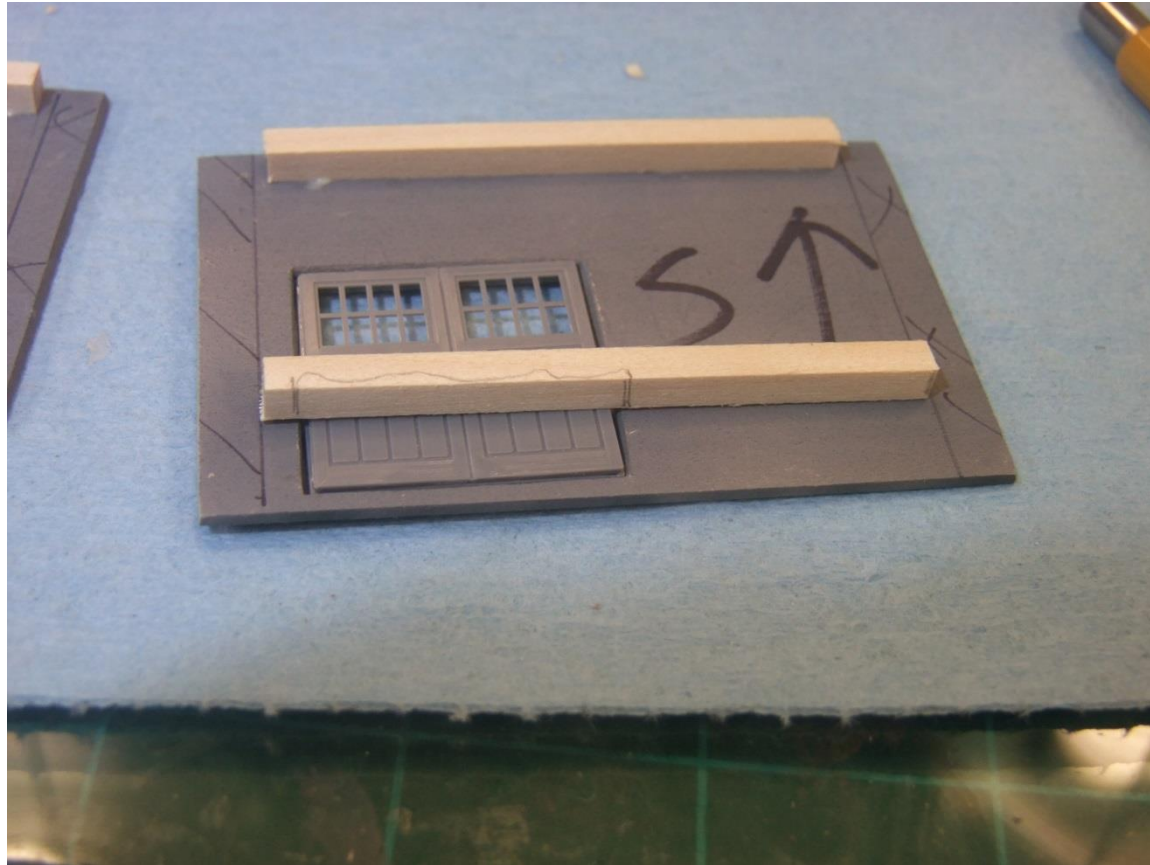
This is at least $\frac{1}{4}$ inch square basswood. Note how it is slightly shorter than the width of the side; also it is not exactly up the edge. The wall is proud of the bracing.



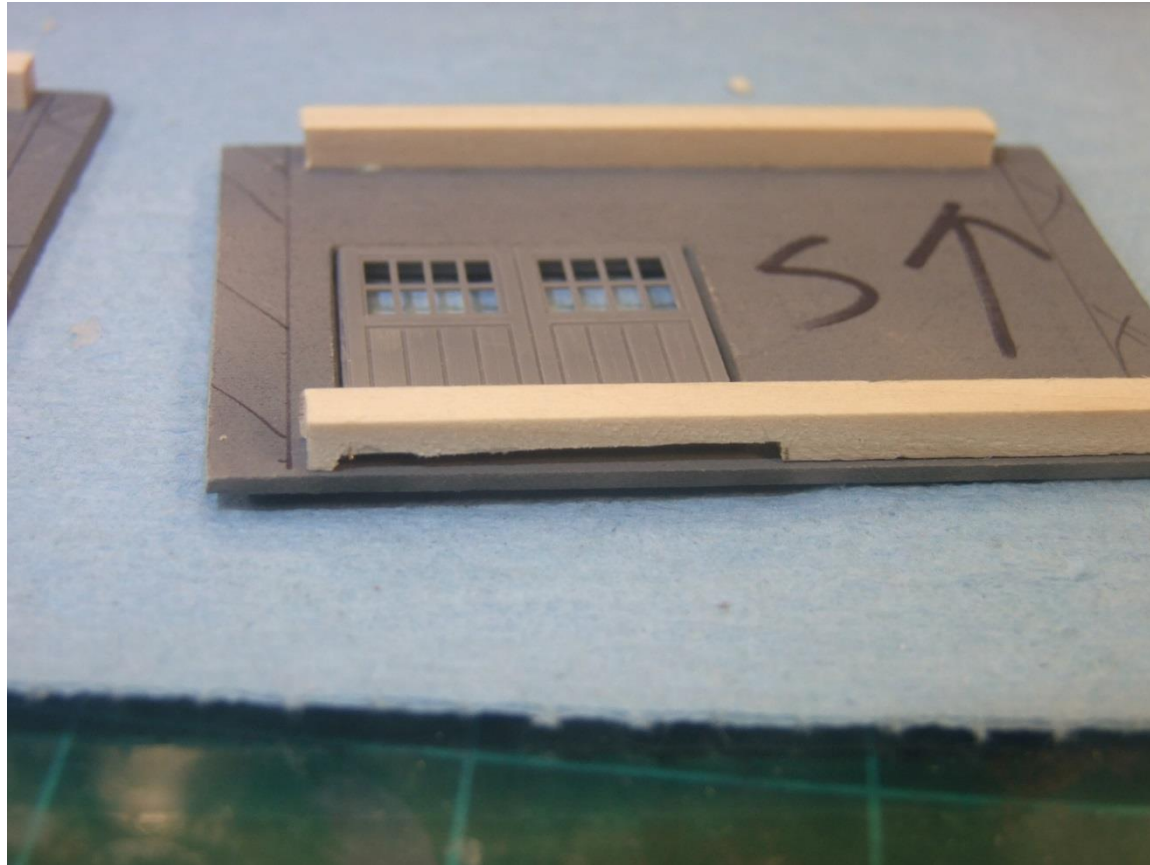
I use yellow carpenters glue to attach and steel weights to hold tight to the walls while drying



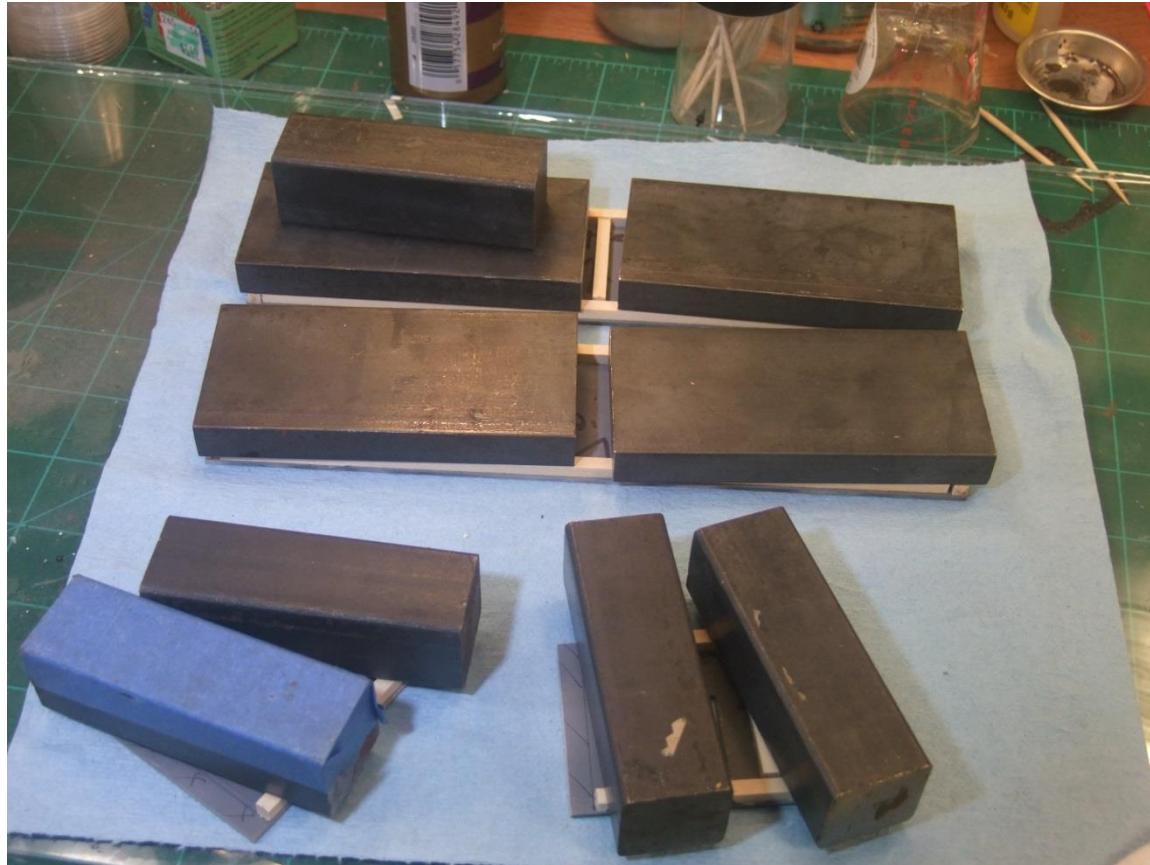
**Don't be cheap with bracing! Brace both dimensions
(with and against the grain)**



If a casting is proud of the back, notch the bracing



Cut out if needed – Note: I’ve marked where the
Side Walls will join into the end walls. If you get this
wrong – you’ll regret it. I use Yellow Carpenters Glue for
these joints.



Put plenty of weight on each wall, but place on Flat Surface.

I build everything on a sheet of tempered glass.



Starting to look good! Notice the pre-shading for the weathering.



Build a platform if needed.



Use bracing to create outline of the platform

Try to make each of the blanks about the same color and hue as the others; avoid the Stevie Wonder, Paul McCartney effect.

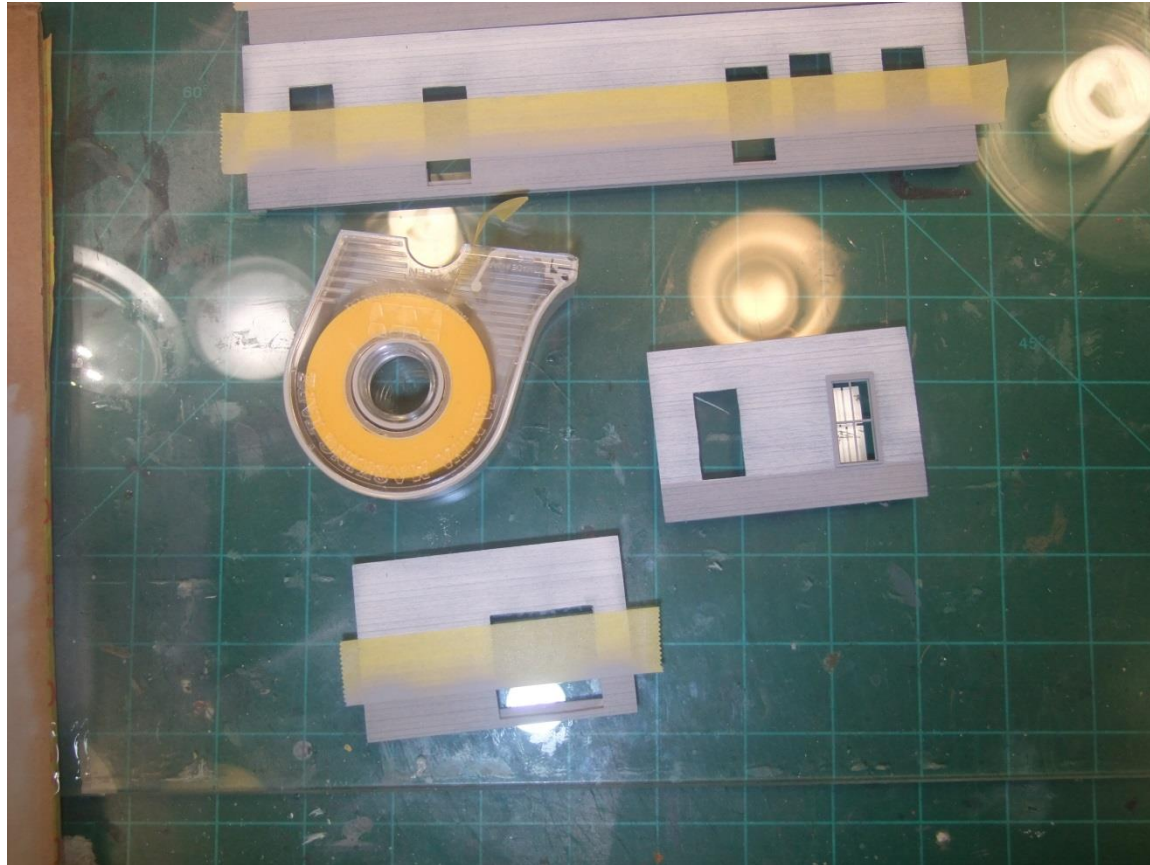


Prime all windows and doors before adding base coat.

I use the same Stynlrez for all priming. Then I paint the trim color.



Mask off parts if you have a two color livery scheme.



Use good tape where the container protects the edges of the tape.



Add Duralor acetate for the windows

Use Aleenes Tacky Glue to glue windows into openings. **NOTICE 'X' MARKS WHERE THE LONG WALLS WILL COME IN. THINK ABOUT WHERE THE BRACING WILL GO BEFORE GLUEING – DON'T BE THAT GUY!**



Next add window shades.

Use construction paper or manila envelopes. I use **Aleene's Tacky Glue** to glue in all castings, glass and shades. NOTICE THE ARROW ON THE BRACING, THIS KEEPS ME FROM PUTTING THE SHADES ON THE BOTTOM OF THE WINDOW!



Now weather the outside, add signs etc.

Note: I'm doing this before assembly.



Example of White “Painted” Signs

First paint the area where you want a sign white. Then spell out words with rub on letters (color doesn’t matter as these are sacrificial – but must contrast with base color)



Paint with the base coat and remove the rub on letters



Viola! Thanks to Earl Smallshaw and the other wonderful modelers I've learned from over the years.

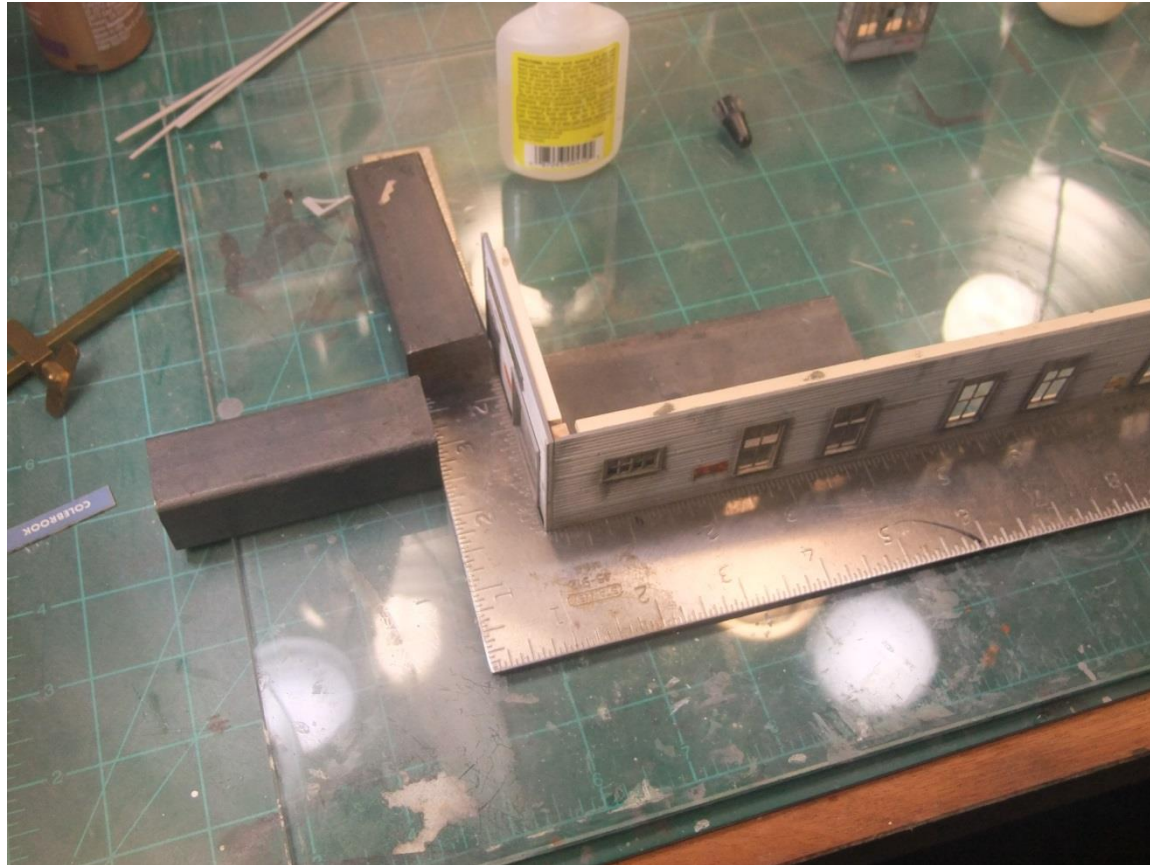


All sides weathered and ready for assembly

Do you think I have enough lights?

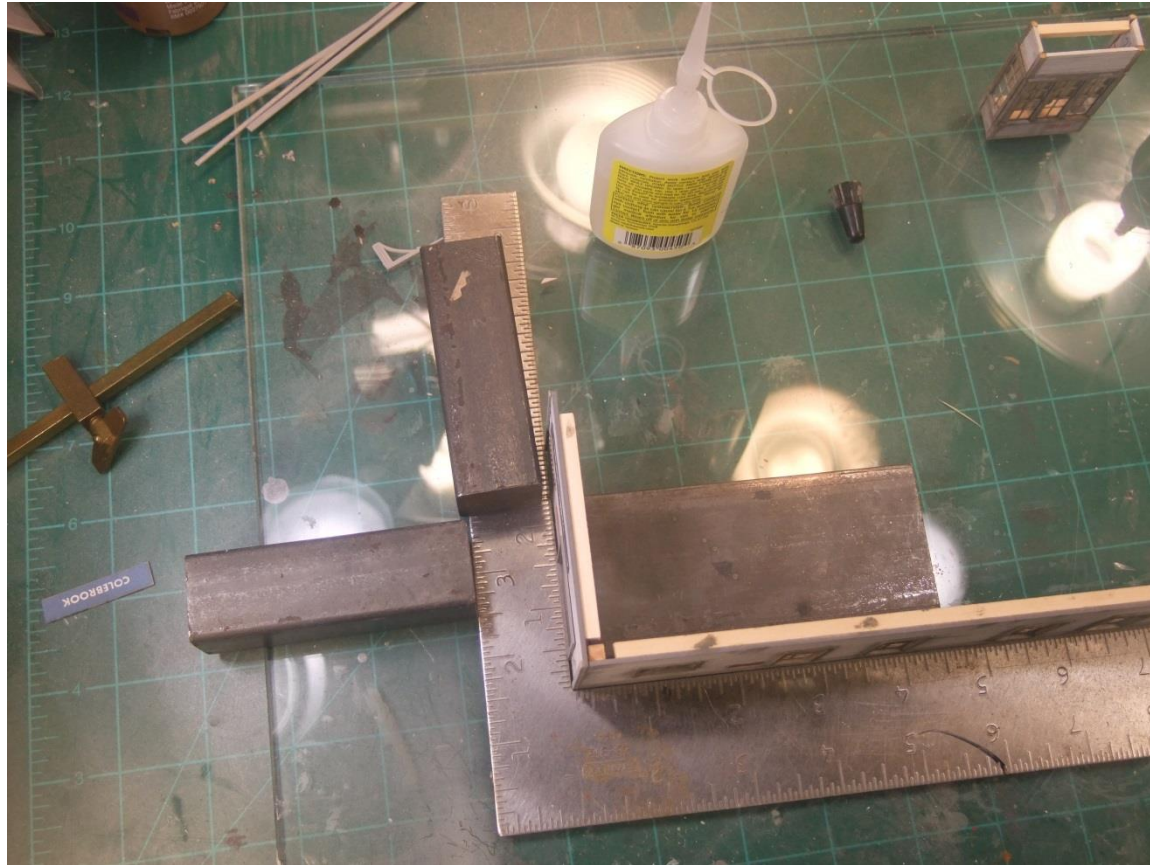


Click to add title – no I don't want to.

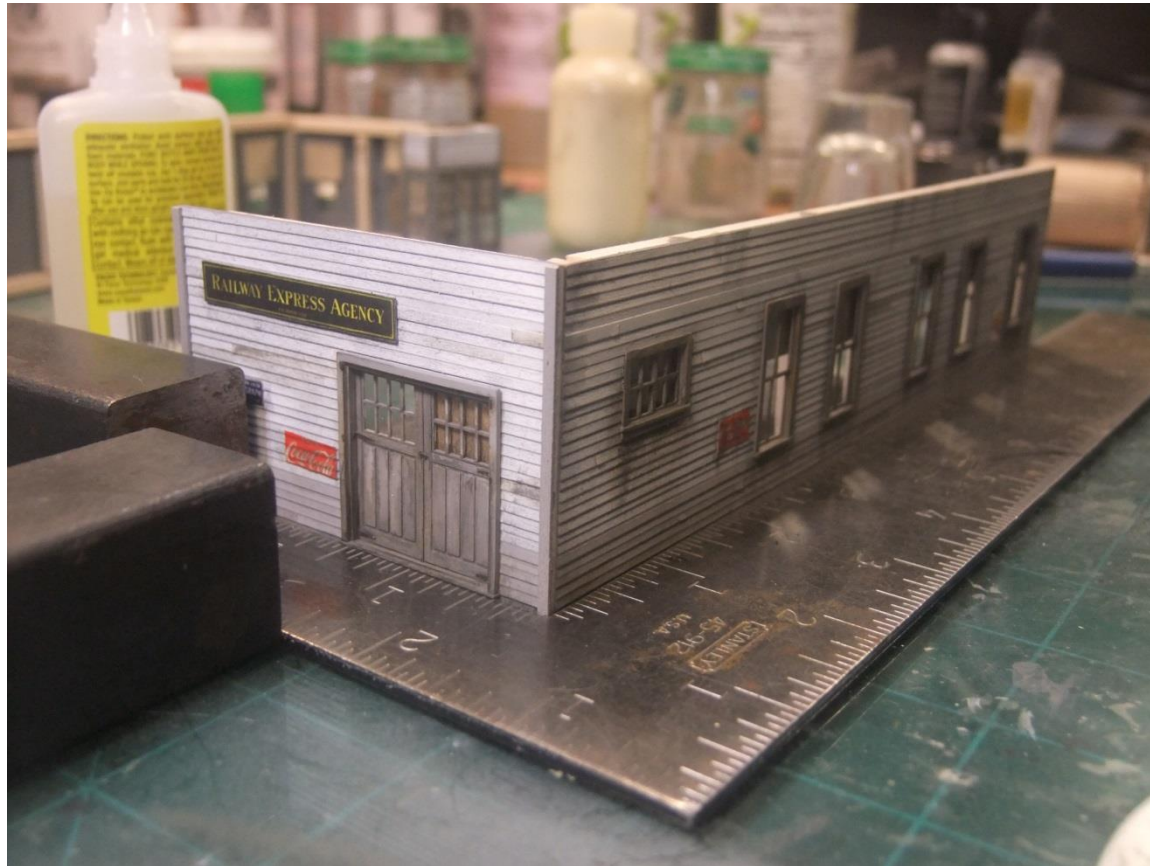


Start Assembly. Keep everything square

I use yellow carpenter's glue again for this step. **Note how the walls are already weathered etc. before assembly.**



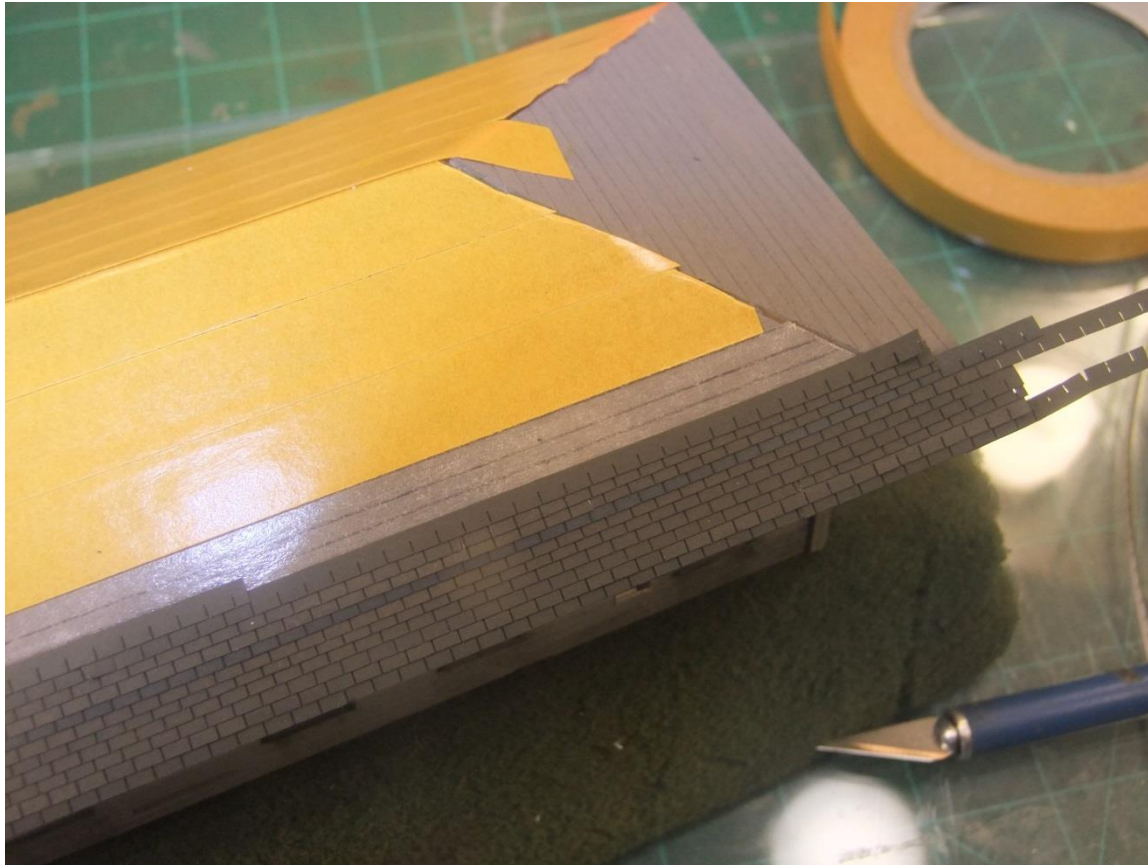
Note how the bracing from one wall is clear of the other wall's bracing.



Look at the warehouse door, it almost looks like a military modeler did this.

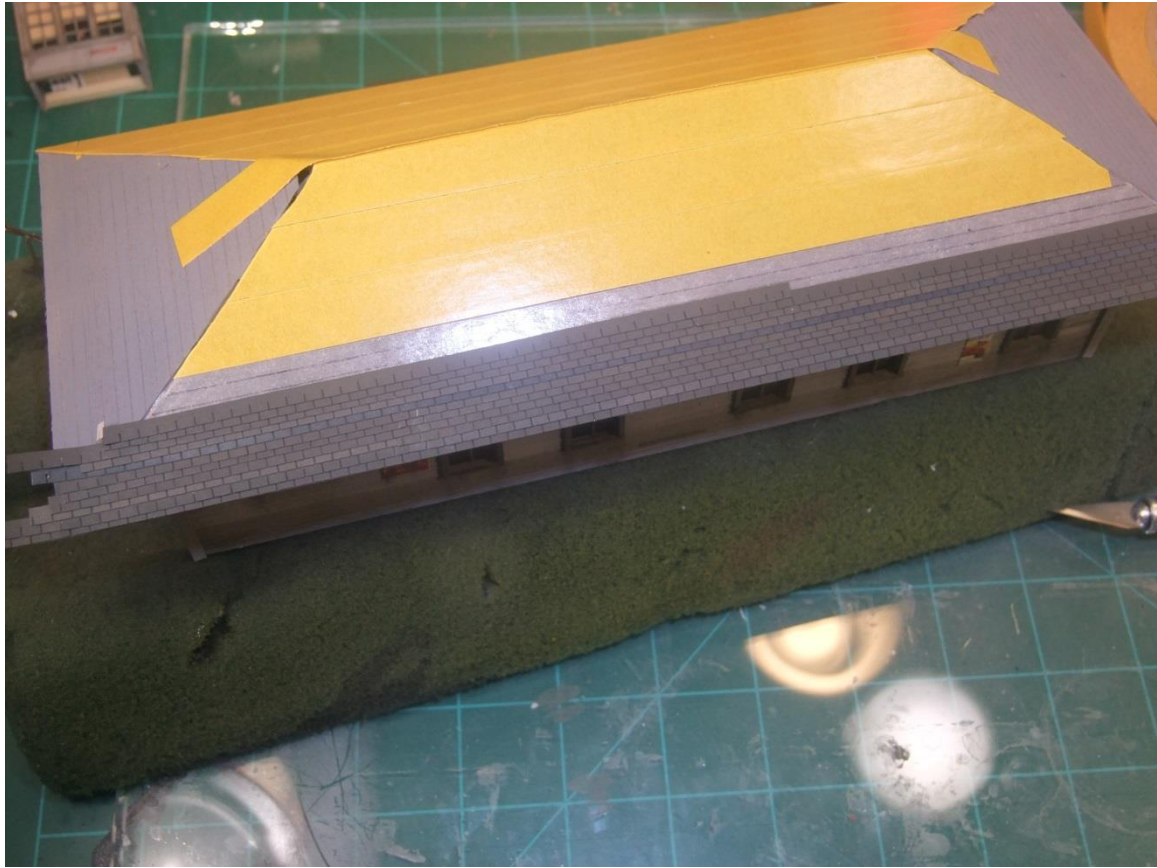


Squares, squares everywhere a square.



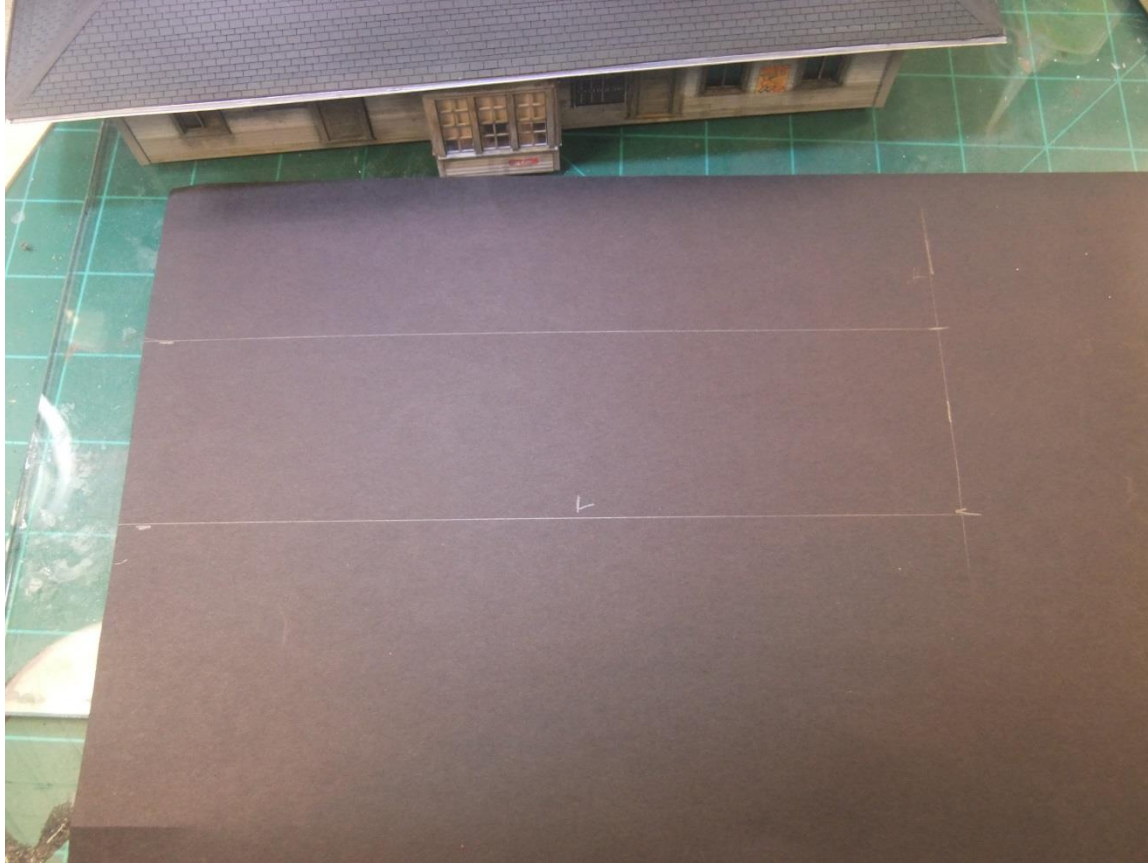
Use wood to create the sub-roof (1/16 in)

Remember to **PRIME** the sub-roof as well. Mark for shingles. Plywood is best if available.



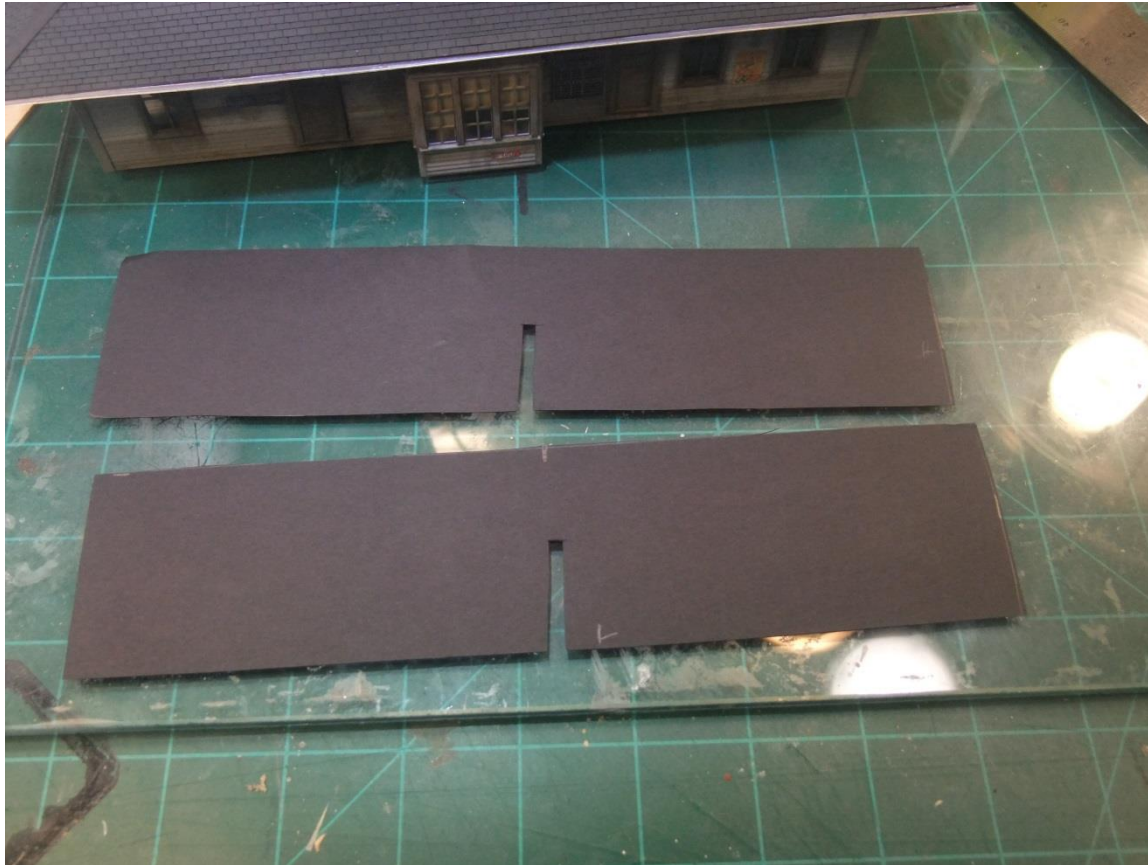


Add roof details and gutters, you don't want your people to get wet!

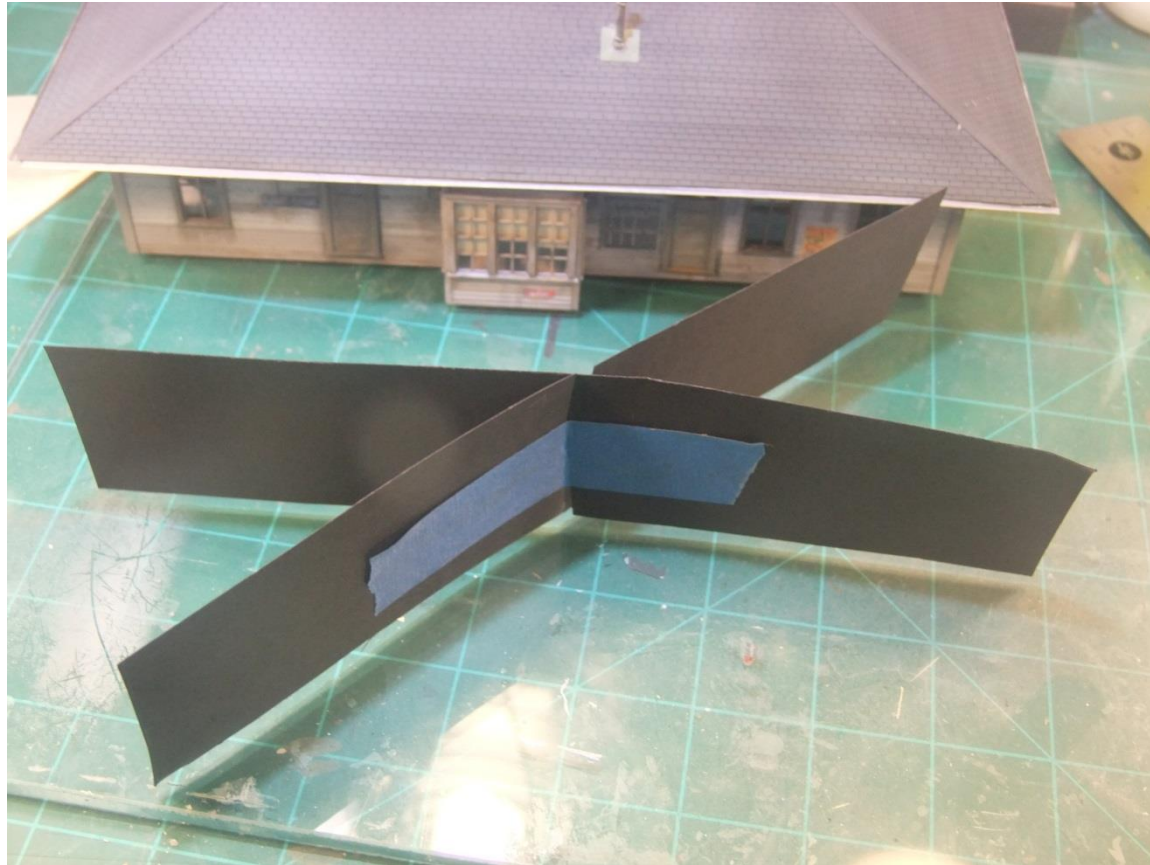


Create View Blocks using black construction paper

Ok, Speed you can use chartreuse if you want!



No, I told you already I don't want to add a title.



Remember, we are not building a real building, we are building a stage set for your trains.

This keeps one from looking through the building.



Wow, almost ready for passengers to arrive. I can hear the 310 to Yuma.



Add details to taste.

